Reaching Consensus and Planning Ahead

Health Forums 2001

Regional Profile: Health & Community Services - Western Region

GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of
Health and Community Services
Policy Development Division

Fall 2001
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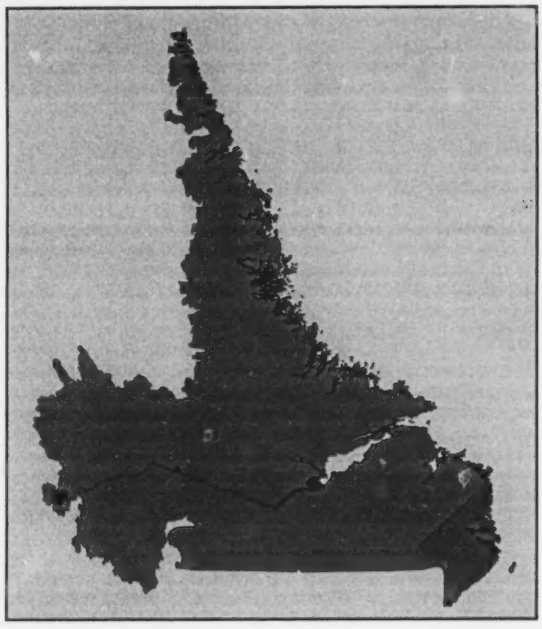
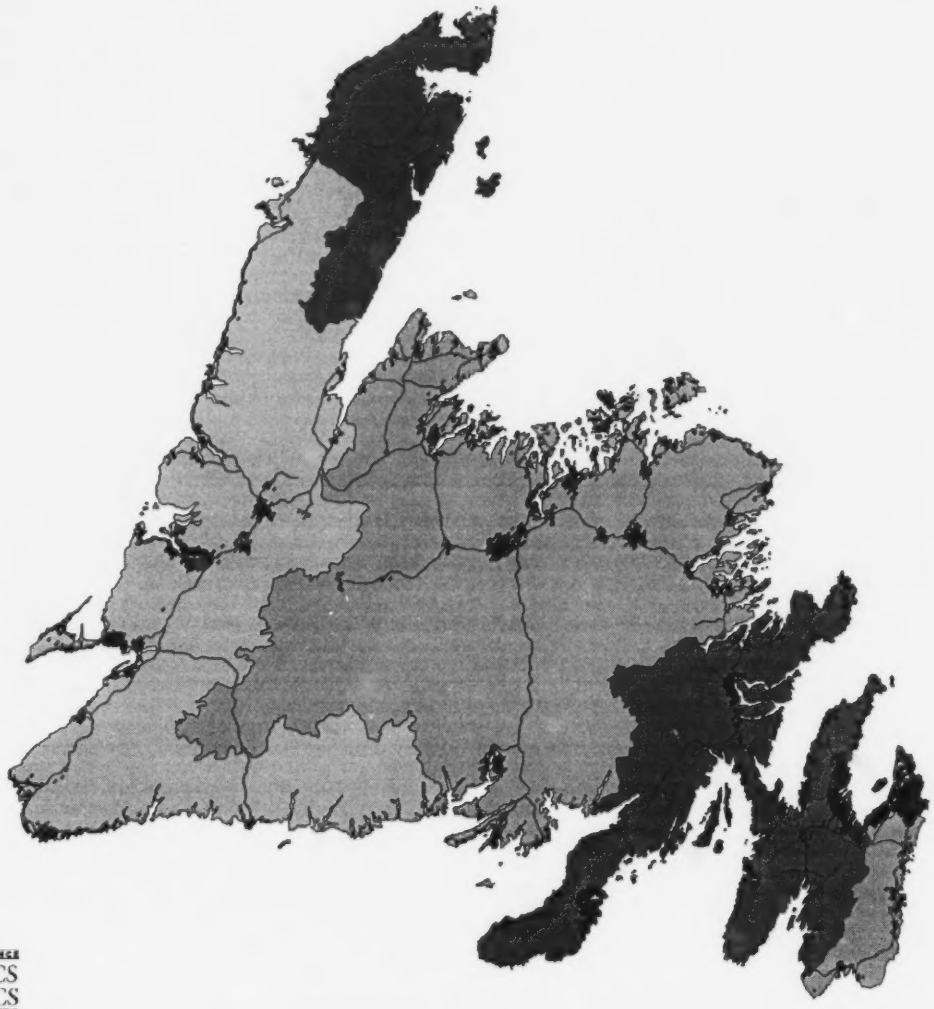


Newfoundland & Labrador Population Distribution, 2001

Health and Community Services Boards

- Health and Community Services St. John's
- Health and Community Services Eastern
- Health and Community Services Central
- Health and Community Services Western
- Grenfell Regional Health Services Board
- Health Labrador Corporation

1 Dot Represents 100 People



DEPARTMENT OF FINANCE
ECONOMICS & STATISTICS BRANCH

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Please Note

Unless otherwise specified data provided are from Department of Health & Community Services data systems.

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www.gov.nf.ca/publicat

Foreword

Julie Bettney
Minister of Health and
Community Services

It is my pleasure to join you on October 16, 2001 in the Western Region to get your perspective on the current and future health and well-being of the residents of the Western area of this Province. It is our hope that through discussion with stakeholders in the Regions that we can begin to address the many issues facing health and community services in our Province.

The vast geography of Newfoundland and Labrador, with its many dispersed communities, provides its own particular challenge for service delivery. Residents of the Western Region make up 16 percent of the population of the Province, distributed throughout 87 diverse communities.

Throughout *Health Forums 2001*, we are conscious that budgetary considerations are an issue for all regions of the Province, and thus, we must determine how to address this to the best advantage of all concerned. While at one time the population of Newfoundland and Labrador was the youngest in the country, it is now aging more rapidly that most other provinces. This too makes us constantly aware that we need to rethink how we provide services.

Your input into this process is very important and I would personally like to thank you for your interest and participation.

Julie Bettney, MHA
Minister of Health and Community Services

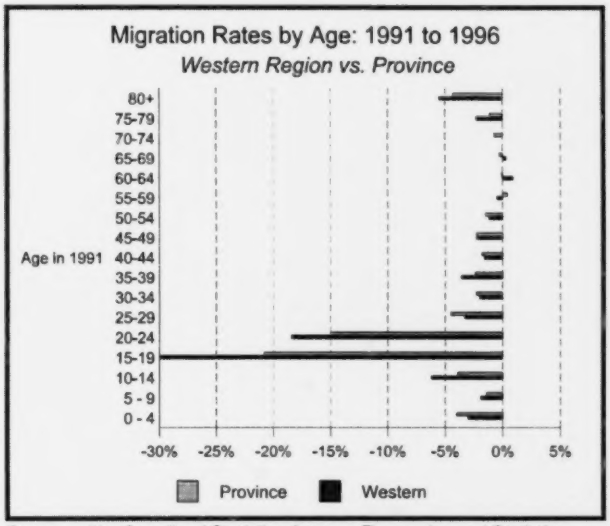
Introduction

HEALTH AND COMMUNITY SERVICES - WESTERN REGION

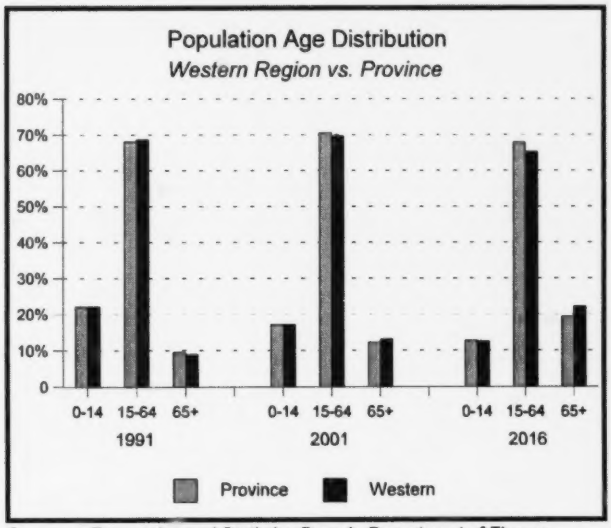
The Western Region runs from Rencontre West to the Port au Port Peninsula to Bartlett's Harbour and from Jackson's Arm to Channel-Port aux Basques, including Howley, Hampden, and The Beaches.

Since 1991, the population of the Western Region has decreased from 96,278 to its current population of 82,585 and it is anticipated that this will decrease to 76,688 by 2016. The map on the inside front cover provides an indication of the population distribution throughout the Region, with 67 percent of residents living in Corner Brook, Stephenville, Stephenville Crossing, Channel-Port aux Basques, Pasadena, or Deer Lake and surrounding area. Individuals living directly in and around Corner Brook alone comprise over 28 percent of the Region's population.

The reasons for the population decline in the Western Region, and throughout the Province as a whole, are three-fold: out-migration, decreasing birth rates and increasing mortality rates. While the Province as a whole is experiencing these phenomena, the effects of out-migration vary. Like most regions, the net out-migration in the Western Region is largest between the ages of 15 and 24. Of the 15 to 19 year-olds in the Region in 1991, 30 percent of them had migrated out of the Region before they reached the ages of 20 to 24 in 1996.



Source: Newfoundland Statistics Agency, Economics and Statistics Branch, Department of Finance. Compiled based on information from Census of Population, Statistics Canada, as well as births and deaths information provided by the Newfoundland and Labrador Centre for Health Information.



Source: Economics and Statistics Branch, Department of Finance Medium Scenario Projections, May 2002

Another interesting element of the population breakdown is the age distribution. In the Western Region there is a only a marginally higher proportion of individuals aged 65 and over than for the Province as a whole, but this margin is predicted to increase over the next 15

years. This too will have an impact on how programs and services are delivered in the Region.

WHAT IS POPULATION HEALTH?

Nationally and provincially there is strong support for using a population health approach to guide the current and future direction of the health and community services (HCS) system. As an essential component of all health policy, a population health approach aims to improve the health of the entire population and to reduce health inequities among population groups. A population health approach reflects the evidence that factors outside the health care system, or sector, significantly affect health. It considers the entire range of individual and collective factors and conditions - and their interactions - that have been shown to be correlated with health status. These factors are commonly referred to as the *Determinants of Health*. Crucial to this definition is the notion that these factors do not act in isolation of each other. It is the complex interactions among these factors that have an even more profound impact on health.

The Determinants of Health:

- Health Services
- Personal Health Practices and Coping Skills
- Healthy Child Development
- Biology and Genetic Endowment
- Social Environments
- Social Support Networks
- Education
- Income and Social Status
- Employment and Working Conditions
- Physical Environment
- Gender
- Culture

A population health approach recognizes that any analysis of the health of the population must extend beyond an assessment of traditional health status indicators like death, disease and disability. A population health approach establishes indicators related to mental and social well-being, quality of life, life satisfaction, income, employment and working conditions, education, and other factors known to influence health. With this in mind, this document has been prepared to provide you with an initial description of the Western Region from a health determinants perspective. It is hoped that this first Departmental endeavor at compiling such a broad array of relevant information will inform the *Health Forums 2001* consultations and be a useful tool in the decision-making process ahead.

Health Services

Health services, particularly those designed to maintain and promote health, to prevent disease, and to restore health and function, contribute to population health.

STRUCTURE OF THE REGIONAL HEALTH AND COMMUNITY SERVICES SYSTEM

Two Regional Health Boards provide the majority of publicly funded health and community services in the Western Region. A small number of other organizations such as the women's

Western Health Care Corporation Facilities

Western Memorial Regional Hospital
- Corner Brook
- 178 acute care beds

- General Surgery
- Ophthalmology
- Orthopedics
- Urology
- Psychiatry
- Cardiology
- Internal Medicine
- Obstetrics & Gynecology
- Renal Dialysis
- Emergency
- Outpatient

Sir Thomas Roddick Hospital
- Stephenville
- 56 acute care beds

- General Surgery
- Ophthalmology
- Internal Medicine
- Obstetrics & Gynecology
- Renal Dialysis
- Mental Health
- Emergency
- Outpatient

Dr. Charles LeGrow Health Centre
- Port aux Basques
- 20 acute care beds
- 30 long-term care beds

- Primary Care
- Acute Care
- Limited General Surgery
- Long-term Care

Rufus Guinchard Health Centre
- Port Saunders
- 8 acute care beds
- 22 long-term care beds

- Primary Care
- Acute Care
- Long-term Care

Bonne Bay Health Centre
- Norris Point
- 5 acute care beds
- 15 long-term care beds

- Primary Care
- Acute Care
- Long-term Care

Calder Health Centre
- Burgeo
- 6 acute care beds
- 16 long-term care beds

- Primary Care
- Acute Care
- Long-term Care

The Dr. J. I. O'Connell Centre
- Corner Brook
- 138 long-term care beds

- Long-term Care
- Acute Rehabilitation

Corner Brook Inter-faith Home for Senior Citizens
- Corner Brook
- 105 long-term care beds

- Long-term Care

Bay St. George Long-term Care Centre
- Stephenville Crossing
- 114 long-term care beds

- Long-term Care

Western Health and Community Services Board Programs & Services

Health Promotion and Protection	Communicable disease control & follow-up Disease prevention Immunization Environmental health Parent-child health School health Adult health
Community Mental Health	Children and Family Adult
Addiction Services	Prevention Treatment Education
Child Youth and Family Services	Child protection Adoptions Child care services Community correction Intervention services
Community Support Services	Assessment and placement Continuing care Home support services Residential services Personal/Community care homes Special assistance for supplies/equipment Palliative/Respite Care

Western Region Quick Facts

- Population: 82,585
  - 0-14: 17.1%
  - 15-64: 69.8%
  - 65+: 13.1%
- 18 HCS Offices/Clinics in 18 communities
- 273 Acute Care Beds
  - Comprising approx. 16% of all acute care beds in the Province
- Average Length of Stay: 6 days
- 440 Long-Term Care Beds
  - Comprising approx. 15% of all long-term care beds in the Province
- Physicians:
  - General Practice: 65
  - Specialists: 59
- Nurses: 704
- Licensed Practical Nurses: 431
- Laboratory and X-Ray: 97
- Social Workers: 112

shelter and group homes are also publicly funded through the Provincial Health and Community Services Budget, but have separate governance structures. In addition, medical services, which include both primary care and specialist services, make up a significant portion of the health services available to residents of the Region.

The two Regional Health Boards include one institutional and one health and community services board. Both Boards are responsible for the delivery of services to all parts of the Western Region. The Western Health Care Corporation, the institutional board, operates nine facilities in the Region. This includes two hospitals, four health centres and three nursing homes. The Board is responsible for 273 acute care beds and 440 long-term care beds. In the fiscal year 1999/00, the organization handled nearly 11,000 admission/discharges and nearly 58,000 emergency visits. Seven hundred and forty-seven babies were born at the hospital in that year.

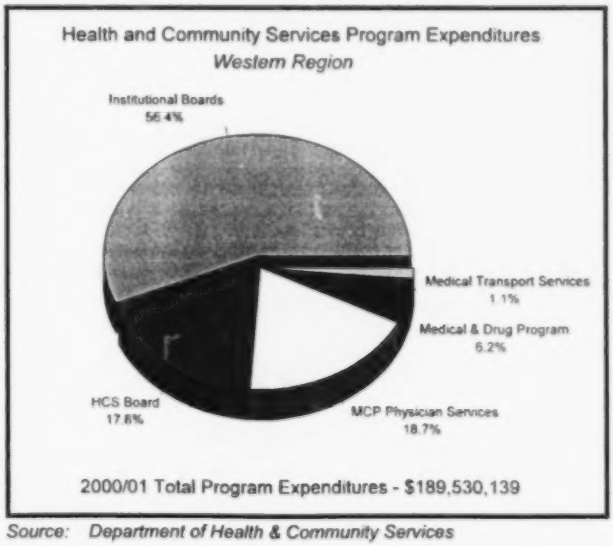
Health and Community Services - Western is the community-based board with a total of 18 offices and clinics throughout the Region. It offers a broad range of community health and services programming, primarily delivered by social workers, nurses and other allied health professionals such as nutritionists and occupational therapists. A more comprehensive overview of the services and facilities in the Western Region can be found on the previous page of this document.

Primary care medical services are provided by approximately 65 family doctors throughout the Region. The Primary Health Care Enhancement Project, located in Port aux Basques, has demonstrated the value of an interdisciplinary approach to primary care. Specialized medical services are provided by approximately 59 specialists.

THE COST OF HEALTH AND COMMUNITY SERVICES IN THE WESTERN REGION

Within the Western Region, the total expenditures in health and community services were $189,530,139. This represents approximately 15 percent of the Province's total regional health and community services program expenditures.

When the expenditure breakdown is examined a number of issues emerge for further consideration. As with other regions of the Province, the cost of institutional care accounts for the majority of program spending. In the Western Region this amounts to just over 56 percent of program dollars, which is slightly less than the provincial figure of 62 percent. Spending on community-based services also differs somewhat from the Province as a whole. Provincially, about 16 percent of total program spending is for community services, while in the Western Region about 18 percent of the regional expenditure is in this area. This same



Source: Department of Health & Community Services

upward trend holds true for physician services. In total, the Province spends 16 percent of the health and community services program dollars on physician services, including both salaried and fee-for-service costs. In the Western Region, nearly 19 percent goes to physician services. One reason for the difference in the expenditures in Western Region between institutional and community-based services, as compared to the Province as a whole, is that the community-based board is responsible for many services (e.g., diabetic education, speech language and audiology services, and an addictions recovery centre) that are under the institutional boards in other regions. When program expenditures in the Western Region are adjusted for these services, the resultant proportion of expenditures allocated to community services (16.6%) is comparable to the provincial figure, while that allocated to institutional care (57.4%) remains slightly lower than the provincial figure.

A number of factors have been identified both provincially and nationally as significant contributors to rising costs in the health sector. The Western Region is impacted by these realities as well. The cost of technology, pharmaceuticals and identified programs such as home support, put major pressure on a system that is struggling to deliver quality services. The ability to provide the level of programming needed to address the demand throughout the Western Region and the Province as a whole, has been a challenge for the health and community services system.

HEALTH AND COMMUNITY SERVICES SECTOR ACTIVITY IN THE WESTERN REGION

Although it is difficult to accurately measure the type, level, and quantity of services delivered in the Western Region, the following information provides us with some useful knowledge about our health and community services system. While most of the material provided applies to the institutional sector only, efforts are ongoing to develop data collection systems for community programming areas.

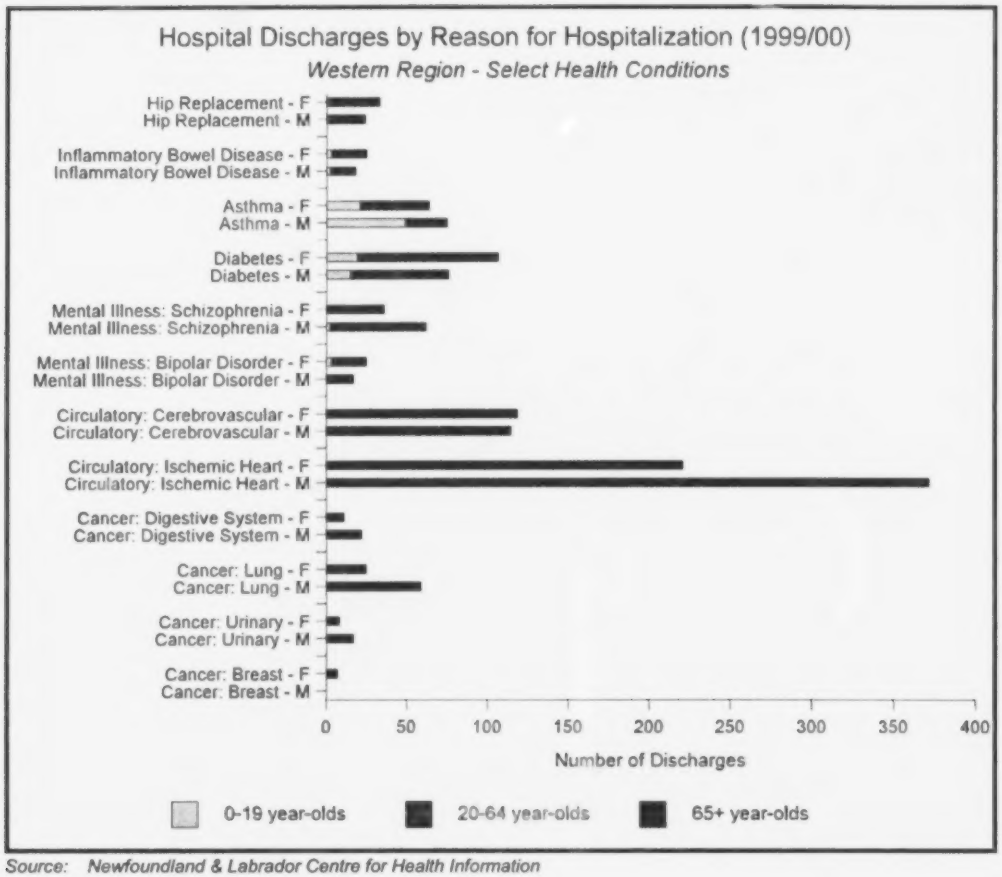
The Western Health Care Corporation is active from both an inpatient and outpatient perspective. In addition to approximately 11,000 admission/discharges and a busy emergency department, the organization performed over 4,200 outpatient operating room visits during the 1999/00 fiscal year.

When outpatient surgeries are examined from the perspective of procedures that were performed on residents from the Western Region (*and not from the facility that performed them*) a number of interesting facts emerge. For the seven most common surgical day procedures, comprising a total of 1,288 surgical interventions, 13 percent were performed on individuals under the age of 20 years. Of that number, the vast majority (82%) related to the insertion of tubes in the ears

Common Surgical Day Procedures (1999/00)

	Males		Females	
Endoscopy (*non-operative*)	183	54.1%	155	45.9%
Lens Extraction	16	50.0%	16	50.0%
Heart/Pericardium Procedure	126	75.9%	40	24.1%
Skin Excision	101	47.9%	110	52.1%
Invasive Diagnostic Procedure	86	50.0%	86	50.0%
Myringotomy	79	59.8%	53	40.2%
D & C of the Uterus	-	-	237	100.0%

Source: Newfoundland & Labrador Centre for Health Information



Source: Newfoundland & Labrador Centre for Health Information

(myringotomy). Individuals age 65 or over underwent just over 257 procedures (20%), of which nearly one-half were for endoscopy. Adults, aged 40 to 59, were the recipients of 507 procedures, or nearly 40 percent of those studied. Males underwent slightly more procedures than females (56% vs. 44%) when D & C was not included. When the D & C procedure was included, the number of females exceeded the number of males (54% vs. 46%).

When hospitalization patterns for a range of common health conditions are explored for residents of the Western Region, a number of interesting trends emerge. Just over half of all hospital admissions were experienced by individuals 65 years and older (50.4%). Children 19 years and younger comprised only 7.6 percent of all admissions. Those age 65 or over were most commonly admitted for total hip replacement, circulatory conditions and cancer with circulatory disorders, accounting for 65 percent of all hospital stays. Young people most often had the diagnoses of asthma and diabetes and these conditions accounted for 88.8 percent of the hospitalizations in that age group. Adults in the middle age bracket dominated the group admitted with mental illness and inflammatory bowel disease.

A gender analysis highlights some interesting findings. The majority of individuals who experienced admissions for cancer, circulatory disease, mental illness and asthma (66%, 59%, 56% & 54%, respectively), were male. Women more often had diagnoses of total hip

replacement, inflammatory bowel disease and diabetes (approximately 58% for all conditions). In total, 44.7 percent of all discharges for these identified conditions were female.

The publicly funded immunization programs in Newfoundland and Labrador include childhood and adult immunizations. Childhood vaccines protect against tetanus, diphtheria, polio, whooping cough, haemophilus influenzae B, measles, mumps and rubella (DPTP/Hib & MMR) in a series of six visits between the ages two months and five years. School programs include hepatitis B and a booster for tetanus in Grade Four, and diphtheria and whooping cough (TdaP) in Grade Nine. Since 1999, Level 2 students have been receiving a second dose of measles, mumps, and rubella vaccine. Adult immunizations protect against influenza and pneumococcal disease. These immunization programs are provided by community health nurses and physicians in all six regions of the Province and continue to obtain excellent coverage.

Immunization Coverage Rates

	DPTP/Hib & MMR		Hepatitis B	
	Western	*Province*	*Western*	*Province*
1995	99.6%	98.7%	97.4%	96.7%
1996	99.8%	98.6%	97.0%	94.0%
1997	99.8%	98.8%	98.0%	97.4%
1998	99.5%	98.2%	97.8%	96.3%
1999	99.9%	98.0%	98.0%	96.9%

Source: Department of Health & Community Services

A number of other indicators can be used to assess various aspects of the system. As we move to providing more and more acute services in an ambulatory setting, one indicator that provides some direction for these decisions is known as 'May Not Require Hospitalization' (MNRH). This indicator, the percentage of cases classified as MNRH, is used to flag diagnoses where treatment may be provided on an outpatient basis. It is a useful screening tool that alerts an organization when a review of admissions/discharges may be in order to identify opportunities for more appropriate utilization. Calculation of this percentage for the Province as a whole reveals that 11.4 percent of hospital admissions/discharges were categorized as MNRH in 1999. This percentage dropped slightly in 2000 to 11.1 percent. Results for residents of the Western Region were slightly higher than that of the Province, with 12.6 percent of all admission/discharges flagged for further study. All of the MNRH admissions occurred in facilities in the Western Region.

HUMAN RESOURCE ISSUES

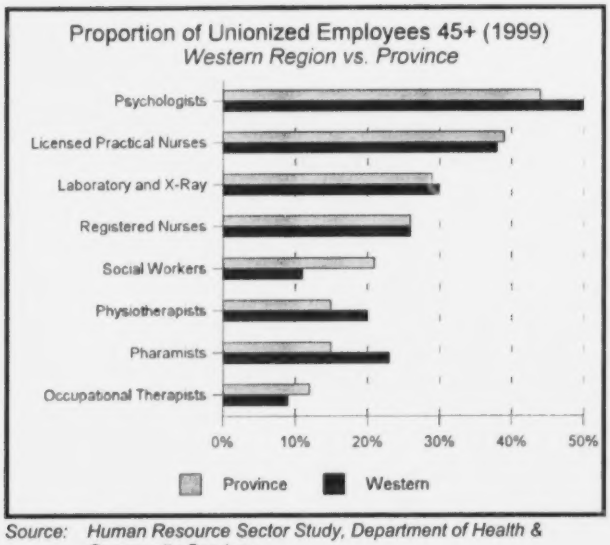
The human resource component of the health and community services system in the Western Region reflects many important characteristics of the system as a whole. Nurses make up the largest group of professionals and are essential in nearly every aspect of the health and community services system.

As with the rest of the Province, there is a concern that the nursing workforce is aging without adequate reserves to minimize the impact of significant retirements. The percentage of both older nurses and older

Selected Front-line (Unionized) Employees (1999)

	Western	Province
Nurses	704	4711
Social Workers	112	556
Pharmacists	13	72
Occupational Therapists	11	96
Physiotherapists	5	89
Psychologists	6	52
Laboratory and X-Ray	97	645
Licensed Practical Nurses	431	2526

Source: Human Resource Sector Study, Department of Health & Community Services



Source: Human Resource Sector Study, Department of Health & Community Services

licenced practical nurses in the Western Region reflects the provincial situation at 26 percent and 38 percent, respectively. For professions such as pharmacy, physiotherapy and psychology, however, the situation is even more critical. In the Western Region these groups have an older workforce than is experienced in the Province as a whole. There are also some clear gaps in the human resource supply for a number of program areas. This limits the system's ability to deliver an adequate level and range of services. The low number of psychologists and physiotherapists, amongst others, poses many challenges for the health and community services system, as well as for those seeking services. This is a long standing and unresolved situation that is experienced in different ways in all regions of the Province.

There are approximately 124 practicing physicians in the Western Region. This represents 14 percent of the total number of doctors in the Province. The proportion of general practitioners to specialists in the Western Region is slightly different from that of the Province, with a greater percentage of general practitioners compared with specialists.

Number of Physicians (March 2000)

	Western		Province	
General Practice	65	52%	432	47%
Specialists	59	48%	480	53%
Total	124	100%	912	100%

Source: Department of Health & Community Services

Personal Health Practices and Coping Skills

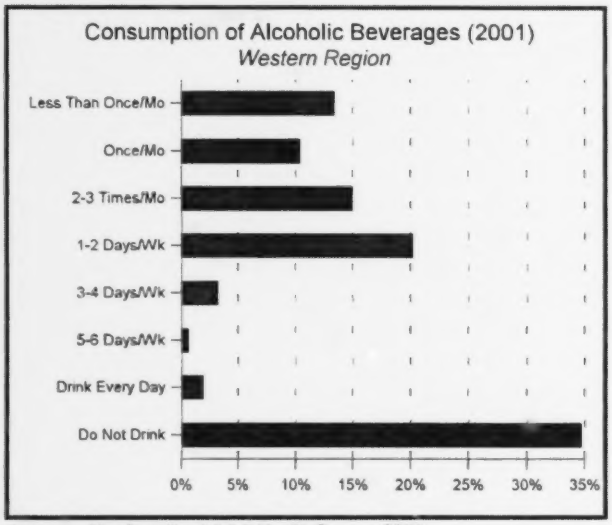
Social environments that enable and support healthy choices and lifestyles, as well as people's knowledge, intentions, behaviours and coping skills for dealing with life in healthy ways, are key influences on health. Through research in areas such as heart disease and disadvantaged childhood, there is more evidence that powerful biochemical and physiological pathways link the individual socioeconomic experience to vascular conditions and other adverse health events.

One's personal habits in areas such as smoking, drinking, eating, and routine exercise have been shown to have a significant impact on one's health. Results of the Newfoundland Adult Health Survey (2001), which surveyed individuals age 18 and over in four regions of the Province (except Grenfell and Labrador, due to response burden), provide us with some

insight into these areas. Results for the Western Region were similar to those in other regions in all of these areas.

When asked about their smoking habits, 27 percent of respondents from the Western Region reported that they were currently smoking, with 18 to 44 year-olds being among the highest. Females were just as likely to smoke as males, except between the ages of 18 to 24 and 35 to 44. For 18 to 24 year-olds, males were more likely to smoke, and for 35 to 44 year-olds, females were more likely to smoke. Overall, males were also more likely to have smoked in the past.

Major gender differences were seen in reported drinking, with females in the Region being much more likely to report that they did not drink (44.1% vs. 24.9%). This difference was most notable among those age 45 or older, and overall likelihood of drinking decreased with age for females. This trend was not as consistent for males. For those who reported drinking, they were most likely to drink between two to eight times a month or less than once a month, with 34.7 percent reporting that they did not drink at all. When questioned about the amount they drink per day, 44 percent of those who drink alcoholic beverages reported that when they do drink, they drink only one or two drinks a day, while 27 percent drink three or four per day and 27 percent were heavy drinkers, drinking five or more drinks per day.



Source: *Newfoundland Adult Health Survey, 2001*
Government of Newfoundland & Labrador

Routine physical activity has consistently been shown to be one way that people can achieve better overall health. Research by the Canadian Fitness and Life-styles Research Institute has found that approximately 60 percent of Newfoundlanders and Labradorians are inactive. While this has improved since 1981, when the figure was 86 percent, it is still a concern for the Province. Two out of three people in this Province are still not active enough to realize health benefits. Women are not as active as men and there is still an alarming incidence of childhood obesity all across Canada. Inactivity also decreases with higher levels of education and income. Four groups have been identified across Canada as being most at risk from inactivity: the poor, people of aboriginal/indigenous ancestry, children, and women.

The Newfoundland Adult Health Survey (2001) also looked at one's body mass index (weight/height). In the Western Region, like in the other regions, males (43.8%) are more likely to be overweight than females (38.4%), but this difference is less pronounced in the Western Region than in the other regions surveyed. While incidence on being underweight is low (4.1% overall), females are slightly more likely to fall in this category than males. Traditionally the percentage of individuals overweight in this Province has been the second highest in the country. Given the low activity levels, the number of persons overweight, and

our aging population, it is not surprising that we have the highest rates of death due to circulatory disease in the country.

One other area where one's personal practices can have an effect on one's health is in the area of sexually transmitted diseases. Chlamydial infections are the most commonly reported sexually transmitted disease. Although the number of cases in the Province appear to have declined in the mid 1990's, they seem to be on the rise again. It is difficult to determine though whether this is due to increased testing by physicians or actual increased incidence. Most cases reported are among females between the ages of 15 and 24. Incidence of gonorrhoea have become minimal and syphillis has disappeared in recent years.

Since HIV reporting began in 1984, 205 (158 male and 47 female) cases of infection have been registered across the Province. Of these, 82 (64 male and 18 female) have become AIDS. While there was a significant increase in HIV/AIDS in the early to mid 1990's, there appears to have been somewhat of a decline in the past few years. Most cases fall in the category of 'men who have sex with men', with 'heterosexual activity' coming in second. Of the 82 AIDS cases reported to date, 60 (51 male and 9 female) have resulted in death.

Healthy Child Development

The effect of prenatal and early childhood experiences on subsequent health, well-being, coping skills and competence is very powerful. Children born in low-income families are more likely than those born to high-income families to have low birth weights, to eat less nutritious food and to have more difficulty in school.

Currently children under the age of 15 make up approximately 17 percent of the population of the Province (17.1% for the Western Region). There are approximately 89,500 children under the age of 15 in the Province, with 14,143 living in the Western Region. During 2000 there were 677 babies born to mothers from the Western Region and 4,847 in the Province as a whole.

When discussing an issue such as healthy child development it is hard to ignore the incidence of children in families on Income Support. During 2000, over 7,835 families in the Western Region received Income Support at some point during the year. Over the past ten years, both the percentage of families on Income Support with children, and the total number of children on Income Support has dropped significantly. In 1991 there were 7,160 children in 4,095 families on Income Support, compared to 5,075 children in 3,095 families in 2000, but the vast majority of this change can be accounted for by the overall drop in the number of children in the area, and across the Province as a whole.

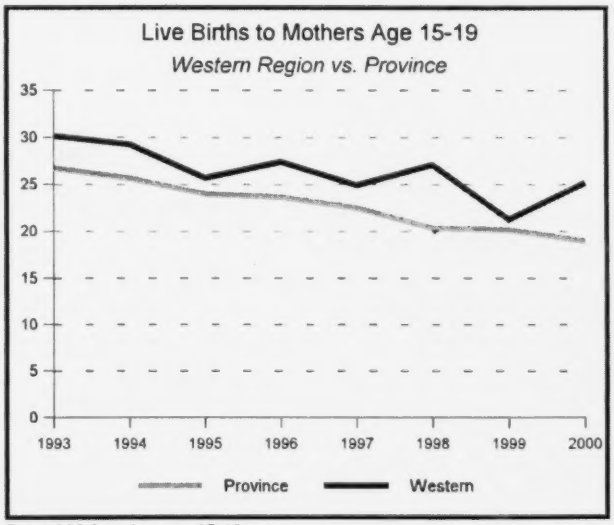
A valuable service offered to families in this Province are the federally and provincially funded Family Resource Program sites located across the Province. These Programs focus on the promotion of well-being, emphasizing healthy child development and family functioning. Currently, there are 74 government funded Programs (including satellite sites) across the

Province, with 24 of them being located in the Western Region. Research has also shown that access to regulated child care increases the likelihood of healthy child development. The Province currently has 133 licensed child care centres (with 5 or more spaces), which provide space for a total of 4,500 children full-time (or more part-time). Eleven of these licensed centres are located in the Western Region, providing space of 298 children full-time. The majority of the full-time spaces in child care centres are occupied by children under the age of five. There are currently 24,603 children under the age of five in the Province, with 3,873 in the Western Region.

The Child Youth and Family Services Act, proclaimed in January 2000 reflects a cultural shift in service delivery practices. Although the safety of the child remains paramount, new ways of intervening promote early intervention and greater emphasis on prevention activities. During 2000, there were 6,549 children under the age of 16 who received some form of protective intervention service because they were vulnerable to abuse and violence. Just under 49 percent were female. In addition, residential placements were provided for approximately 900 children and youth. This includes the 228 children in continuous custody (i.e. permanent care), 302 youth over the age of 15 (who signed voluntary care agreements) and the remainder, 370, who were temporarily placed for short periods but are now back with family.

For the same period in the Western Region, 1,083 children (49% female and 51% male) received protective services, which represents 16.5 percent of the provincial total. As well, for those receiving residential services, 37 children were in continuous custody and 29 were youth with voluntary agreements.

Children born to teenage mothers are at higher risk for any number of difficulties. Pregnancy during the teen years disrupts educational achievement for the young mother and places her in jeopardy of low educational outcomes, poverty, and other forms of social exclusion. Adolescent motherhood is also associated with lone parenting which often brings its own set of challenges.



Per 1,000 females age 15-19

Source: Live Birth Notification System, Newfoundland & Labrador Centre for Health Information

Although there has been a steady decrease in the number of children born to mothers age 15 to 19 (and very few births to mothers less than age 15) much of this can be accounted for by the declining number of 15 to 19 year-olds in the population as a whole. With this taken into account, a slight decline in the proportion of females age 15 to 19 having children is still evident but this trend is not as consistent in the Western Region. The rate of live births to mothers age 15 to 19 in the Western Region has continually been higher than that of the Province as a whole during this time period. It should also be noted that this trend is not restricted to teenage mothers. The overall birth rate for the Region, and Province, is also declining.

Babies born to teenage mothers tend to have lower birth weights than those born to older mothers. Babies born less than 2,500 grams (or 5.5 lbs.) can have a number of health concerns and these health concerns may sometimes result in death. Provincially, the overall incidence of low birth weight babies has been decreasing since 1993, with the rate in Western (55.1/1,000 live births) being slightly higher than that of the Province as a whole (49.5/1,000).

Biology and Genetic Endowment

The basic biology and organic make-up of the human body are a fundamental determinant of health. Genetic endowment provides an inherited predisposition to a wide range of individual responses that affect health status. Although socioeconomic and environmental factors are important determinants of overall health, in some circumstances genetic endowment appears to predispose certain individuals to particular diseases or health problems.

The National Population Health Surveys have shown that there is a link between family history and heart disease. They found that people over the age of 20 are more likely to be diagnosed with heart disease if they have a family history of the disease.

Diseases of the circulatory system are a major concern in this Province as they are the leading cause of death by disease and Newfoundlanders and Labradorians have the highest death rates due to diseases of the circulatory system in the country. The rate of deaths due to diseases of the circulatory system has been relatively constant since 1986, with males being consistently more likely to die due to this cause than females. Rates of death due to neoplasms (cancers) and diseases of the respiratory system have been steadily increasing since 1986 but these trends are less consistent for the Western Region. For neoplasm, the rate of death for males has continued to be much higher than for females. While a similar gender difference is evident with diseases of the respiratory system, this gap has widened, with males showing a steady increase. Over the 12-year period from 1986 to 1997, the rate of death due to endocrine and immunity diseases was fairly constant.

Leading Causes of Death by Disease (1998)
Rates per 100,000 population

	Western		Province	
	M	F	M	F
Diseases of the Circulatory System (includes heart attacks, stroke, etc.)	319	255	343	300
Neoplasms (Cancers)	224	157	225	175
Diseases of the Respiratory System	84	74	80	53
Endocrine & Immunity Diseases (includes diabetes)	29	22	32	38

Source: Newfoundland & Labrador Centre for Health Information

According to the Adult Health Survey (2001), incidence of self-reported chronic health conditions are similar in the Western Region to that of the other regions surveyed with arthritis/rheumatism (29%), recurring backaches (21%), high blood pressure (20%), and allergies (19%) being the most common conditions reported by individuals in the Region. The 1996/97 National Population Health Survey found that Newfoundlanders and Labradorians have the second highest self-rated health status in the country, with 26 percent rating their

health as excellent and 65 percent rating their health as good or very good. However, life expectancy remains among the lowest in the country (NF: 77.7 years at birth, Canada 78.6 years at birth). As is the case across the country, women (80.5 years) in the Province tend to live longer than men (75.0 years).

According to Statistics Canada's Health and Activity Limitation Survey (1991) ten percent of the population (approx. 57,953 people) of Newfoundland and Labrador has some form of physical or mental disability. This rate is highest among individuals over age 65 (41.4% or approx. 23,086 people). As of 1991, 97.5 percent of individuals under the age of 65 with disabilities were residing in households (2.5% were residing in institutions) compared to 85.6 percent for those age 65 or older (14.4% were residing in institutions). As a result of de-institutionalization, persons with disabilities now receive supports allowing them to reside in the community.

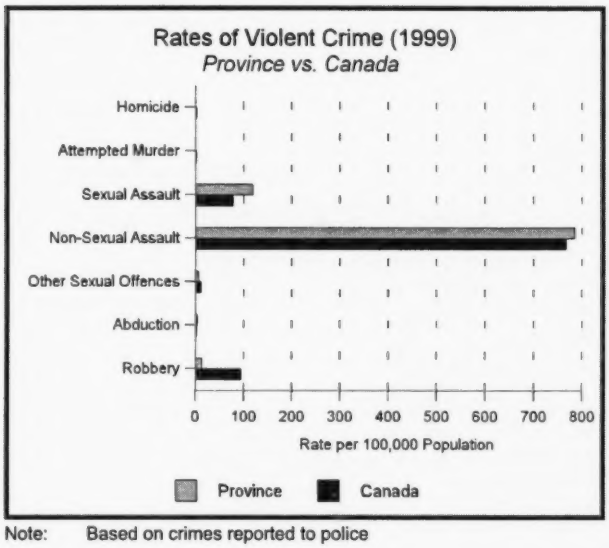
Social Environments

The array of values and norms of a society influence in varying ways the health and well-being of individuals and populations. In addition, social stability, recognition of diversity, safety, good working relationships, and cohesive communities provide a supportive society that reduces or avoids many potential risks to good health. Studies have shown that low availability of emotional support and low social participation have a negative impact on health and well-being.

Results from the 1996 census provide us with a profile of the family characteristics throughout the Region and the Province. Family sizes in this Province tend to be small with 2-person families comprising 36.8 percent of all families, 3-person families at 26.2 percent, 4-person families at 25.8 percent, and 5 or more person families comprising only 11.1 percent. This trend is also reflected in the Western Region. The vast majority of families in Newfoundland and Labrador continue to be husband-wife families, with over 90 percent of them being married. Lone-parent families comprise 13.1 percent of all families in the Province and 13.9 percent in the Western Region, with the majority having only one child.

Income Support statistics indicate that while the proportion of households headed by youth under the age of 25 availing of Income Support has continued to decrease over the last several years, nearly 20 percent continue to be headed by youth. (Note: a household may contain only one individual.) As a result of the new Child, Youth and Family Services Act, the Health and Community Services and Integrated Boards also have legislative authority to enter into agreements to provide services to youth age 16 and 17. In Newfoundland and Labrador there are 303 youths in receipt of residential services to live independently (29 in Western) and 28 who continue to live at home (2 in Western) but receive intervention services.

Incidence of crime, especially violent crime, in an area also affects one's health and well-being. Newfoundland and Labrador continues to have the lowest overall crime rate in the country and the fourth lowest rate of violent crime; behind Quebec, Prince Edward Island, and Ontario. While the Province continues to have low rates of homicide, attempted murder, abduction, and robbery, our assault rate is higher than the national average. This is particularly noticeable when it comes to sexual assaults.



Note: Based on crimes reported to police

Source: Canadian Crime Statistics, 1999, Statistics Canada. Catalogue no. 85-205-XPE.

During 2000/01, there were 199 incarcerations from Provincial Courts in the Western Region. The rate (2.8 per 1000 population) of incarcerations was comparable to that for the Province as a whole (3.0 per 1000). Youths aged 15 to 24 comprised 26.1 percent (NF: 27.3%) of all incarcerations, while individuals over the age of 54 accounted for 6.5 percent (NF: 5.8%).

Social Support Networks

Support from families, friends and communities is associated with better health. The importance of effective responses to stress and having the support of family and friends provides a caring and supportive relationship that seems to act as a buffer against health problems.

Newfoundlanders and Labradorians are among the most generous and caring in the country when it comes to donating their time and money. According to Statistics Canada's recently released document, *Caring Canadians, Involved Canadians,* the residents of this Province lead the country in volunteer hours, with the average volunteer giving 206 hours of their time annually; compared to a national average of 162 hours. Provincially, 31 percent of the population gives of their time to volunteer activities. This again, is higher than the national average of 26.7 percent. Additionally, eight out of ten Canadians reported that they contributed time, on their own, to assist people outside their household with basic activities such as: shopping, driving to appointments or stores, housework, baby-sitting and doing home maintenance or yard work for others.

What is of concern, is that between 1997 and 2000 there was a notable decrease across the country in the number of individuals volunteering, while those volunteering were giving more hours. This may have some considerable implications for the future of a province, such as

ours, that has relied heavily on unpaid supports both within and outside of the family. It is already apparent that it is difficult to recruit new volunteers and those who are volunteering are stressed to the limits. This needs to be taken as a caution to not take volunteer support for granted, assuming that we can count on a sustainable volunteer base into the future and to be cautious that our volunteers are not taking on too much and, as a result, jeopardizing their own health and well-being.

According to the National Advisory Council on Aging, relatives and friends provide between 75 and 80 percent of all personal care in Canada. The vast majority of these caregivers are women and a large number are over the age of 60. The health system has always depended on these informal caregivers to provide a certain amount of care and they are an integral part of our communities. Again, the concern is that these people are getting older and are often taking on too much.

In addition to social supports received through one's family and friends, people often receive comfort and support through being a member of an organization or group. Like Canadians in general, just over 50 percent of Newfoundlanders and Labradorians aged 15 and older are members of an organization or group. These groups often play a vital role to people, especially in times of stress, and serve to strengthen communities as a whole.

Education

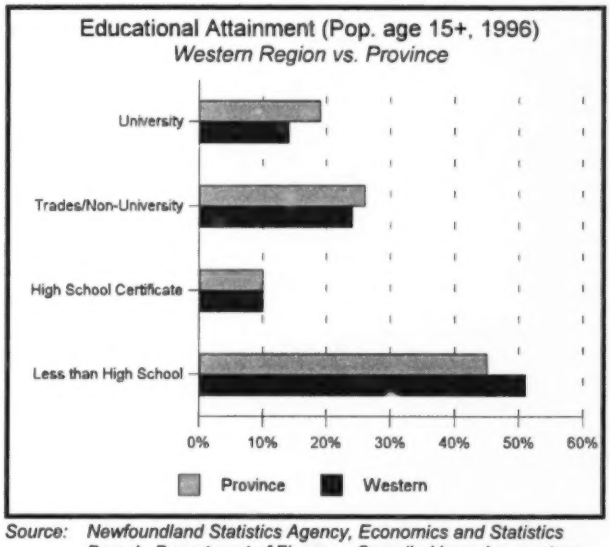
Health status improves with level of education. Education increases opportunities for income and job security, and equips people with a sense of control over life circumstances - key factors that influence health.

The secondary school system in the Western Region consists of mainly two School Districts; Deer Lake/Corner Brook/St. Barbe and Cormack Trail. There are also three schools in the Region operated by the Northern Peninsula/Labrador South School District (located in Hawke's Bay, Port au Choix, and Port Saunders), two schools operated by the Conseil Scolaire Francophone Provincial (located in De Grau and La Grand'Terre), and one private school in Corner Brook. The Western Region has 64 public schools and one private school. The Region also has a vast number and variety of post-secondary education facilities. The public college, the College of the North Atlantic, has campuses in Bay St. George, Corner Brook, and Port aux Basques. Additionally, the Region has the only campus of Memorial University located outside of St. Johns; Sir Wilfred Grenfell College in Corner Brook and the only school of nursing located outside of St. John's; Western Memorial School of Nursing, also in Corner Brook. There are also four private college campuses in the Region, operated by: Academy Canada (Corner Brook), Canadian Career Institute of Technology (Corner Brook), CompuCollege School of Business (Stephenville), and Victorian Order of Nurses (Corner Brook).

High school pass rates across the Province have risen steadily from 63.5 percent in 1988/89 to 90.4 percent in 1999/2000. This represents an overall increase of nearly 27 percentage points

in the last 12 years. For 1999/2000, the high school pass rate for the Western Region was the highest overall in the Province, at 94.3 percent.

According to the 1996 census, 51 percent of individuals in the Western Region had less than a high school education. This is slightly higher than the Provincial figure of 45 percent. This may reflect the fact that the Region has a slightly higher proportion of individuals over the age of 65 who are more likely to have not completed high school during the 1920's and 30's. Regardless, this needs to be taken into account in the day-to-day communications with people to ensure that they are provided with good information in a manner that they can understand in order to make informed choices about their lives.



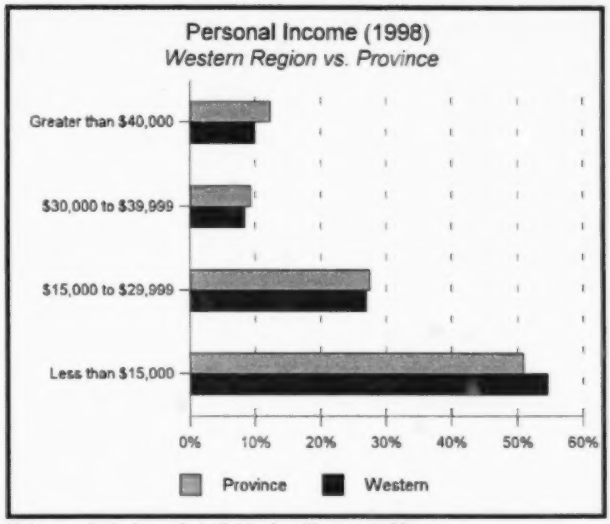
Source: Newfoundland Statistics Agency, Economics and Statistics Branch, Department of Finance. Compiled based on custom tabulations from the Census of Population, 1996, Statistics Canada.

Income and Social Status

Health status improves at each step up the income and social hierarchy. High income determines living conditions such as safe housing and ability to buy sufficient good food. The healthiest populations are those in societies which are prosperous and have an equitable distribution of wealth.

Personal income in the Western Region is comparable to that of the Province as a whole. While there may be a slightly higher proportion of individuals in the lowest income bracket, this needs to be balanced with the cost of living across the various areas of the Province. One clear determinant of income level that continues to be seen is educational attainment. The higher an individual's educational attainment, the greater likelihood that they will be in a higher income bracket.

Personal income includes income obtained through the various social transfers such as: Old Age Security, Canada Pension Plan, Child Tax Benefits, GST Credit, Employment Insurance, Workers Compensation, Income Support, and NCARP/TAGS. In 1998, 29.8 percent of the personal income in the Western Region was from social transfers, as opposed to 25 percent for the Province as a whole. This incidence of social transfers is typical in regions with seasonal employment. The most notable difference in the Region is in Employment Insurance; again, tied to seasonal employment. Incidence of Income Support in the Western Region is higher than that of the Province (16.3%) as a whole, with 20.3 percent of individuals in the Region being in receipt of Income Support at some point in time during 1998.



Note: Includes only individuals with reported income
Source: Newfoundland Statistics Agency, Economics and Statistics Branch, Department of Finance. Compiled based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada.

Results of the 2001 Newfoundland Adult Health Survey indicate that people in the Region generally are not worried about having enough to eat due to lack of money, nor has this ever actually been a problem for them. Some people did indicate, however, that they did not eat the quality or variety of foods that they wanted to because of a lack of money (5.1% saying often & 11.8% saying sometimes). These results would suggest that food insecurity is not a critical problem throughout the Region.

Employment and Working Conditions

Unemployment, underemployment and stressful work are associated with poorer health. People who have more control over their work circumstances and fewer stress related demands of the job are healthier and often live longer than those in more stressful or riskier work and activities.

According to the Newfoundland and Labrador Labour Activity Survey, the average weekly employment rate in 1999 for the working age population (18-64) in the Western Region was 56 percent; which is comparable to the provincial average of 59 percent. Some seasonality was also evident in the Region, as illustrated by a range in employment from 50 percent in winter to 61 percent during the summer. Of the working age population in the Region, 71.5 percent (NF: 72%) worked at some time during the year and 19.9 percent (NF: 18%) collected Employment Insurance at some point during the year.

Not surprisingly, educational attainment was shown to be a major contributing factor to the employment rate, with those having completed a post-secondary program being significantly more likely to be working. The major employers in the Western Regions were in the areas of retail trade, public administration, health care and social services, educational services, construction, accommodation and food services, fish harvesting/fisherpeople, and agriculture/forestry/fishing/hunting. The prevalence of individuals employed in accommodation and food services, fish harvesting/fisherpeople, and agriculture/forestry/fishing/hunting is indicative of the seasonality of employment experienced by some individuals.

One's age, gender, industry and occupation are all determinants of workplace injury. The average age at which a worker becomes injured in the Province is 37 and frequency of injury declines with age, while clinical severity generally increases. Work-related injuries occur at higher rates in men. Over the 10-year period from 1989 to 1998, 69.6 percent of all lost-time claims were registered by males. During the same period, 49.3 percent of all lost-time injuries occurred in the service industry. This is not surprising given that over 60 percent of all provincial employers are classified in this category. The risk of injury is also dependent on one's occupation. The labouring profession has had the highest frequency of injury, with 12.1 percent of claims being registered by workers involved in labour and elemental work. Another interesting finding is that, in general, hourly paid employees have significantly higher rates of injury than salaried employees. Overall, the majority of claims are due to sprains and strains, primarily of the musculoskeletal origin, with the most common being back injury.

Physical Environments

Physical factors in the natural environment (e.g., air, water quality) are key influences on health. Factors in the human-built environment such as housing, workplace safety, community and road design are also important influences.

The 1996 Census found a high degree of home ownership in Newfoundland and Labrador, with 77 percent of individuals owning their homes. The same also holds true for the Western Region, with 77.5 percent owning their own homes. For those owning their homes, the average monthly payment (including heat, light & municipal taxes) in the Western Region was slightly lower than that for the Province as a whole ($406 and $469, respectively), while average monthly rental payments (including heat, light & any applicable municipal taxes) were comparable ($471 and $498, respectively).

As indicated in the previous section, the type of occupation one has and the sector one works in also are an important determinants of one's health and well-being. An individual who works in a labouring profession and/or works in the service industry may be at a higher risk of injury.

Interestingly enough, while we have made many strides to reduce exposure to second-hand smoke over the past 10 years, the Newfoundland Adult Health Survey (2001) found that 40 percent of all respondents reported that they had been exposed to second-hand smoke in the past month, with the most commonly sited location being in public places (63%). Sixty-five

percent of respondents also indicated that they are bothered by smoke from cigarettes and 88 percent said they supported having a 'No smoking policy' in public places.

Undoubtedly, the quality of the drinking water in a community is a concern for residents. While people often see water advisories as a concern for their health, illnesses due to water impurities are very rare in this Province. Although there are approximately 392 water supplies that currently have boil water advisories in affect (*figures are as of September 26, 2001*), these are precautionary measures and once the water is boiled it is completely safe for consumption.

Advisories currently affect approximately 259 communities across the Province. The advisories are typically put into effect due to inadequate disinfection, inadequate chlorine levels, or unsatisfactory bacteriological test results. In the Western Region there are currently 76 water supplies with boil water advisories affecting 54 communities.

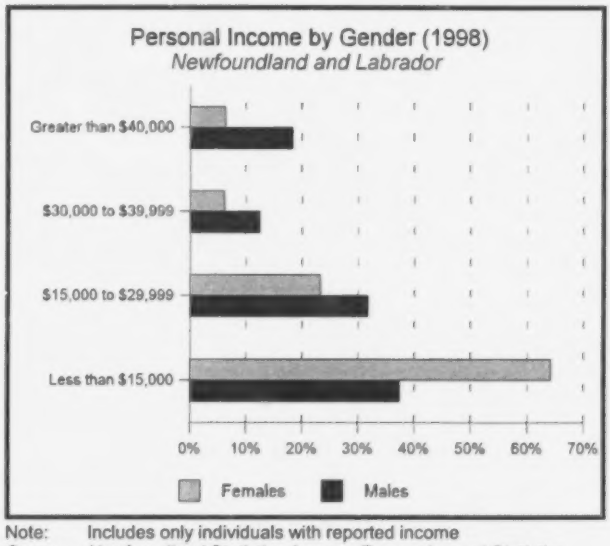
An additional water quality issue that affects people's drinking water is Trihalomethanes (THMs). Out of the 333 tested water supplies across the Province, 70 do not conform to Health Canada guidelines of 100 micrograms per litre for THMs, while all other chemical testing indicates very good water quality. Fourteen of the water supplies tested with high levels of THMs are in the Western Region. Efforts are currently under way to mitigate against high THMs levels for the communities in which they have been identified.

Gender

Gender refers to the array of society-determined roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis. "Gendered" norms influence the health system's practices and priorities. Many health issues are a function of gender-based social status or roles. Women, for example, are more vulnerable to gender-based sexual or physical violence, low income, lone parenthood, gender-based causes of exposure to health risks and threats (e.g., accidents, STDs, suicide, smoking, substance abuse, prescription drugs, physical inactivity). Measures to address gender inequality and gender bias within and beyond the health system will improve population health.

High school pass rates continue to be substantially higher among females than males, and this remains a considerable source of concern. While the pass rate for males has risen over the past 12 years, there is still a very noticeable gap. These gender differences were less apparent in Western Region to that of the Province in 2000, with the pass rate for females being 95.3 percent and 93.2 percent for males.

While historically, overall differences in educational attainment throughout the population were apparent between males and females, this overall difference has all but disappeared in the Western Region, and for the Province as a whole. However, more recent provincial data indicate that females between the ages of 25 and 39 are more likely to have completed a post-secondary education and overall, females are less likely to have very low levels of education (8 years or less). Although females have made considerable progress in the area of educational attainment, significant differences still remain in levels of income both within the Western Region, and across the Province as a whole. This is not specific to the Province and remains an issue of national and international concern. Significantly higher proportions of females remain in the lowest income brackets and few achieve the higher incomes. As of 1998, females continued to earn an average of 42 percent less than men. Additionally, when one looks at employment rates in the population of the Province, woman are ten percent less likely to be employed than men and this difference is largest in the Western Region, at 24 percent. These factors have significant implications for women, especially as they enter into their pensionable years.



Note: Includes only individuals with reported income
Source: Newfoundland Statistics Agency, Economics and Statistics Branch, Department of Finance. Compiled based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada.

Women continue to be the major caregivers in our Province, both informal and formal. The large majority of front-line health professionals (nurses, social workers, and licensed practical nurses) are women and women continue to provide the vast majority of personal care through home support services and unpaid support to relatives and friends. Additionally, women live longer and may require personal care themselves for longer periods of time. This, coupled with gender differences in income and employment, may have a significant impact for the futures of women in this Province and the country as a whole.

Culture

Some persons or groups may face additional health risks due to a socio-economic environment, which is largely determined by dominant cultural values that contribute to the perpetuation of conditions such as marginalization, stigmatization, loss or devaluation of language and culture and lack of access to culturally appropriate health care and services.

While the Province has a broad cultural diversity, historically, having been settled by peoples from all over the globe, English is by far the most common language spoken in homes across the Province (98.5%); with small proportions of the population speaking French (0.4%), Aboriginal languages (0.3%), Germanic languages (0.15%), Chinese (0.13%), and other languages (0.52%). The cultural diversity in this Province is more widely seen through the variety of traditions and religious practices throughout the Province.

Conclusion

The Western Region is a diverse, interesting area that provides the Island with a vital link to mainland Canada. Its two regional health boards provide health and community services to a population largely centered in the areas of Corner Brook, Stephenville, and Deer Lake. We have much to learn from both the residents and history that can be of great benefit to the entire Province. Our provincial health and community services system has been, and will continue to be, improved as a result of the participation, commitment and hard work of many individuals and organizations from this Region. The people of Western Newfoundland know that their continued involvement is critical to the decision making process facing the health sector today. Successful outcomes will be achieved if we all work together. If you would like to provide any further input into this process, please fell free to respond to Reaching Consensus and Planning Ahead.

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Department of Finance:
Economics & Statistics Branch Web Site: *www.econ.gov.nf.ca*
Newfoundland Statistics Agency Web Site: *www.nfstats.gov.nf.ca*

Newfoundland and Labrador Centre for Health Information Web Site: *www.nlchi.nf.ca*

Health and Community Services - Western Region Web Site: *www.hcsw.nf.ca*

Western Health Care Corporation Web Site: *www.healthwest.nf.ca*

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